

ABSTRACT OF THE DISCLOSURE

Provided is a variable ratio torque converter 10 including an input member 12 for connection to a primary drive, an output member 14 coupled to a torque multiplying member 16 for connection to drive a load. The input member has paired permanent magnet poles 24, 26, and the output member 14 has a plurality of pairs of movable periphery magnets 32 per pole, and a winding 34 arranged for each peripheral magnet pairs. The windings 34 are connected to a controllable inverter 18 arranged to control torque from the torque multiplying member 16. The input member 12 and the output member 14 are arranged so that the output member 14 rotates with the input member 12 under magnetic force. The moving peripheral magnets 34 cause the windings to produce a slip related control signal for the inverter 18 to control the torque from the torque multiplying member 16. The converter 10 may also include a slip responsive retard arrangement 42 for retarding actuation of said peripheral magnets 34 to thereby delay movement when there is a slip between respective speeds of the input member 12 and the output member 14.